

ABSTRACT

A radiotherapy device comprises a radioactive wire adapted to deliver an intended dosage of radiation to a lesion or other selected body tissues. The radioactive wire comprises an inner core about which is disposed an outer buffer layer of platinum or other suitable metal of high atomic number. The buffer layer preferably comprises a thin, continuous wire wrapped about the inner core. The radiotherapy device may be made into a variety of shapes, such as a straight wire, a helical coil, or other more complex shape, and it may be provided with an elastic memory. The device may be adapted for attachment to a delivery wire for controlled placement, as through a delivery catheter or microcatheter, at the treatment site. When accurate positioning of the device is not necessary, it can simply be injected through the delivery catheter or microcatheter, and in that event a delivery wire is not needed. The device may be provided with mechanically or electrically releasable means for attachment to the delivery wire during delivery, and for releasing the device at the treatment site. The device may be provided with a shoulder, hook, or other suitable gripping means on its distal end, which can be lassoed by a microsnare device for retrieving the device from the body.